California

Science and Engineering Profile

	STATE	U.S.	Rank		STATE	U.S.	Rank
Doctoral scientists,1995	57,927	453,928	1	Total R&D performance, 1995 (millions)	\$36,133	\$177,210	1
Doctoral engineers,1995	13,900	86,738	1	Industry R&D, 1995 (millions)	\$28,710	\$130,332	1
S&E doctorates awarded, 1996	3,385	27,230	1	Academic R&D, 1996 (millions)	\$2,791	\$22,481	1
of which, in engineering	23%	23%		of which, in life sciences	56%	56%	
in life sciences	21%	25%		in engineering	14%	16%	
in psychology	17%	13%		in physical sciences	13%	10%	
S&E postdoctorates, 1996 in doctorate-granting institutions	6,647	37,019	1	Higher education current-fund expenditures, 1995 (millions)	\$20,741	\$182,602	1
S&E graduate students, 1996	43,275	430,631	1	Number of SBIR awards, 1990-1997	7,040	31,155	1
in doctorate-granting institutions				Patents issued to state residents, 1997	11,290	61,699	1
Population, 1997 (000s)	32,268	271,464	1	Gross state product, 1996 (billions)	\$962.7	\$7,677.4	1
Civilian labor force, 1997 (000s)	15,972	137,564	1	of which, agriculture	2%	2%	
				manufacturing, mining, construction	18%	23%	
Personal income per capita, 1997	\$26,570	\$25,598	14	transportation, communication, utilities	7%	8%	
				wholesale and retail trade	16%	16%	
Federal spending				finance, insurance, real estate	23%	19%	
Total expenditures, 1997 (millions)	\$160,874	\$1,405,060	1	services	23%	20%	
R&D obligations,1996 (millions)	\$12,618	\$66,087	1	government	12%	12%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico. Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development by Agency and Performer: Fiscal Year 1996

[Thousands of Dollars]

	Total	Federal	All FFRDCs	Industrial firms	Universities &	Other	State & local	State rank
		Intramural			Colleges	nonprofits	government	
Total, all agencies	12,617,601	1,281,696	2,062,527	7,136,776	1,707,278	415,258	14,066	1
Department of Agriculture	71,854	54,270	0	82	17,164	324	14	3
Department of Commerce	96,918	17,448	100	67,921	9,916	480	1,053	2
Department of Defense	7,370,786	840,542	235,239	5,991,341	254,663	49,001	0	1
Department of Energy	901,842	12,231	722,459	59,230	88,206	14,256	5,460	2
Dept. of Health & Human Services	1,351,322	2,199	27,295	113,699	918,068	288,297	1,764	2
Department of Interior	46,415	41,494	0	776	3,868	220	57	1
Department of Transportation	24,387	2,290	0	14,079	3,264	347	4,407	6
Environmental Protection Agency	13,947	0	0	4,253	8,445	804	445	10
Nat'l Aeronautics & Space Admin.	2,447,940	310,681	1,077,076	863,528	161,027	34,847	781	1
National Science Foundation	292,190	541	358	21,867	242,657	26,682	85	1
State rank	1	4	1	1	1	2	2	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable